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=> d his ful

     (FILE 'HOME' ENTERED AT 19:25:41 ON 31 OCT 2002)

     FILE 'REGISTRY' ENTERED AT 19:25:48 ON 31 OCT 2002
L1        36414 SEA GALLIUM
L2            1 SEA GALLIUM/CN
L3            0 SEA GALLIUM AND HYDROXY AND PYRONE
L4            0 SEA GALLIUM AND HYDROXY? AND PYRONE?
L5         2520 SEA GALLIUM COMPLEX
L6            0 SEA L5 AND PYRONE
L7            0 SEA HYDROXYPYRONE AND GALLIUM
L8            1 SEA HYDROXYPYRONE
                D
L9            0 SEA GALLIUM AND PYRANONE
L10          50 SEA GALLIUM AND PYRAN?
                D 1-50
L11           1 SEA GALLIUM NITRATE/CN
                D
L12           1 SEA DIDEOXYINOSINE/CN
L13           1 SEA DIDEOXYCYTIDINE/CN
L14           0 SEA 5-AZIDOTHEMIDINE/CN
L15           0 SEA 5-AZIDOTHYMIDINE/CN
L16           2 SEA AZT/CN
                D
                D 2

     FILE 'REGISTRY' ENTERED AT 19:31:40 ON 31 OCT 2002
L17           1 SEA 30516-87-1/RN
                D L17 SQIDE TOTAL

     FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISALERTS, ADISINSIGHT,
     ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS,
     CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2,
     DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 19:32:09
ON
     31 OCT 2002
L18         112 SEA 5-AZT
L19          35 SEA 5-AZIDOTHYMIDINE
                D 1-35 KWIC
                D 29

     FILE 'REGISTRY' ENTERED AT 19:35:10 ON 31 OCT 2002
L20           0 SEA 5-AZT
L21        5021 SEA 5 AZIDO?
L22           0 SEA 5 AZIDOTHYMIDINE
L23           7 SEA AZIDOTHYMIDINE
                D 1-7

     FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISALERTS, ADISINSIGHT,
     ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS,
     CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2,
     DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 19:36:46
ON
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[redacted]

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     31 OCT 2002
L*** DEL     75 DUP REM L18 (37 DUPLICATES REMOVED)
                D 1- KWIC
L*** DEL   1476 S (GALLIUM OR L2 OR L10 OR L11) AND (HIV OR HUMAN IMMUNO?
VIR?
L*** DEL    791 S L25 AND HIV
L*** DEL    599 DUP REM L26 (192 DUPLICATES REMOVED)
L*** DEL     65 S L26 AND (RIBO? (A) REDUCTAS?)
L*** DEL      7 S L28 AND HIV-2
                D 1-7
                D 7 KWIC
                D 6 KWIC
L*** DEL     28 S L26 AND HIV-2
                D 1-28
                D 27 KWIC
                D L28 1-65
L*** DEL    513 S L26 NOT (L28 OR HIV-2)
                D 1-513
                D 504 KWIC
                D 307 KWIC
                D 199 KWIC
                D 188 IALL
                D 187 IALL
                D 185 IALL
                D 184 IALL
                D 146 IALL
                D 108 IALL
                D 61 IALL
L*** DEL    685 S L25 NOT L26
L*** DEL    495 DUP REM L34 (190 DUPLICATES REMOVED)
                D 1-495
L24         236 SEA (GALLIUM OR L2 OR L10 OR L11) AND (RIBO? OR RNA) (5A)
                (REDUCT?)
L25           0 SEA L24 AND NEUCLEOSID? (5A) INHIBIT?
L26           0 SEA (GALLIUM OR L2 OR L10 OR L11) AND (NEUCLEOSID?) (5A)
                (INHIBIT?)
L27          95 SEA (GALLIUM OR L2 OR L10 OR L11) AND (NUCLEOSID?) (5A)
                (INHIBIT?)
L28          93 DUP REM L27 (2 DUPLICATES REMOVED)
                D 1-93 KWIC
L29         133 DUP REM L24 (103 DUPLICATES REMOVED)
L30          72 SEA L29 NOT L27
L31          61 SEA L29 AND L27
                D 1-61
L32          72 DUP REM L30 (0 DUPLICATES REMOVED)
                D 1-72
                D 72 IALL
                D 68 IALL
                D 67 IALL
                D 49 IALL
                D 45 IALL
L33          60 SEA GALLIUM MALTOLATE OR 108560-70-9
L34          21 SEA L33 AND (AIDS OR HIV OR HUMAN IMMUNO?)
L35          18 DUP REM L34 (3 DUPLICATES REMOVED)
                D 1-18
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d his ful

     (FILE 'HOME' ENTERED AT 19:25:41 ON 31 OCT 2002)

     FILE 'REGISTRY' ENTERED AT 19:25:48 ON 31 OCT 2002
L1        36414 SEA GALLIUM
L2            1 SEA GALLIUM/CN
L3            0 SEA GALLIUM AND HYDROXY AND PYRONE
L4            0 SEA GALLIUM AND HYDROXY? AND PYRONE?
L5         2520 SEA GALLIUM COMPLEX
L6            0 SEA L5 AND PYRONE
L7            0 SEA HYDROXYPYRONE AND GALLIUM
L8            1 SEA HYDROXYPYRONE
                D
L9            0 SEA GALLIUM AND PYRANONE
L10          50 SEA GALLIUM AND PYRAN?
                D 1-50
L11           1 SEA GALLIUM NITRATE/CN
                D
L12           1 SEA DIDEOXYINOSINE/CN
L13           1 SEA DIDEOXYCYTIDINE/CN
L14           0 SEA 5-AZIDOTHEMIDINE/CN
L15           0 SEA 5-AZIDOTHYMIDINE/CN
L16           2 SEA AZT/CN
                D
                D 2

     FILE 'REGISTRY' ENTERED AT 19:31:40 ON 31 OCT 2002
L17           1 SEA 30516-87-1/RN
                D L17 SQIDE TOTAL

     FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISALERTS, ADISINSIGHT,
     ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS,
     CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2,
     DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 19:32:09
ON
     31 OCT 2002
L18         112 SEA 5-AZT
L19          35 SEA 5-AZIDOTHYMIDINE
                D 1-35 KWIC
                D 29

     FILE 'REGISTRY' ENTERED AT 19:35:10 ON 31 OCT 2002
L20           0 SEA 5-AZT
L21        5021 SEA 5 AZIDO?
L22           0 SEA 5 AZIDOTHYMIDINE
L23           7 SEA AZIDOTHYMIDINE
                D 1-7

     FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISALERTS, ADISINSIGHT,
     ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS,
     CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2,
     DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 19:36:46
ON
     31 OCT 2002
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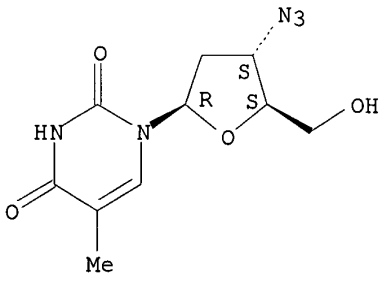
[redacted]

L24	75	DUP REM L18 (37 DUPLICATES REMOVED) D 1- KWIC
L25	1476	SEA (GALLIUM OR L2 OR L10 OR L11) AND (HIV OR HUMAN IMMUNO? VIR? OR L12 OR DIDEOXYINOSINE OR L13 OR DIDEOXYCYTIDINE OR INOSINE OR CYTIDINE OR THYMIDINE OR AZIDOTHYMIDINE OR AZT OR L17)
L26	791	SEA L25 AND HIV
L27	599	DUP REM L26 (192 DUPLICATES REMOVED)
L28	65	SEA L27 AND (RIBO? (A) REDUCTAS?)
L29	7	SEA L28 AND HIV-2 D 1-7 D 7 KWIC D 6 KWIC
L30	28	SEA L27 AND HIV-2 D 1-28 D 27 KWIC D L28 1-65
L31	513	SEA L27 NOT (L28 OR HIV-2) D 1-513 D 504 KWIC D 307 KWIC D 199 KWIC D 188 IALL D 187 IALL D 185 IALL D 184 IALL D 146 IALL D 108 IALL D 61 IALL
L32	685	SEA L25 NOT L26
L33	495	DUP REM L32 (190 DUPLICATES REMOVED) D 1-495

CN 874: PN: WO02055741 SEQID: 889 claimed sequence
CN **Azidothymidine**
CN Azitidin
CN AZT
CN AZT (pharmaceutical)
CN BW-A 509U
CN NSC 602670
CN Retrovir
CN Retrovir IV
CN Timazid
CN ZDV
CN Zidovudine
FS STEREOSEARCH
DR 399024-19-2
MF C10 H13 N5 O4
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



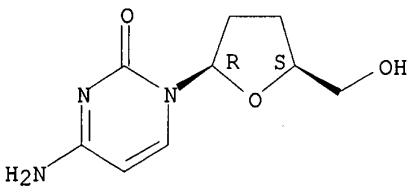
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4148 REFERENCES IN FILE CA (1962 TO DATE)
165 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4157 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L40 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2002 ACS
RN 7481-89-2 REGISTRY
CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2',3'-Dideoxycytidine

CN 877: PN: WO02055741 SEQID: 892 claimed sequence
CN D 2C
CN ddC
CN **Dideoxycytidine**
CN Hivid
CN NSC 606170
CN PN: WO9948371 PAGE: 45 claimed sequence
CN Ro 24-2027/000
CN Zalcitabine
FS STEREOSEARCH
DR 176485-55-5
MF C9 H13 N3 O3
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, NIOSHTIC, PHAR, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).

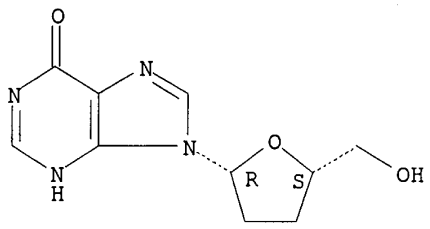


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1257 REFERENCES IN FILE CA (1962 TO DATE)
43 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1264 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L40 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2002 ACS
RN 69655-05-6 REGISTRY
CN Inosine, 2',3'-dideoxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2',3'-Dideoxyinosine
CN 876: PN: WO02055741 SEQID: 891 claimed sequence
CN BMY 40900
CN DdI
CN DdI (nucleoside)
CN Didanosine
CN **Dideoxyinosine**
CN NSC 612049
CN Videx
FS STEREOSEARCH
MF C10 H12 N4 O3
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IPA, MEDLINE, MRCK*, MSDS-OHS, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1559 REFERENCES IN FILE CA (1962 TO DATE)
31 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1568 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L40 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2002 ACS
RN 30516-87-1 REGISTRY
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3'-Azido-3'-deoxythymidine
CN 3'-Azidothymidine
CN 3'-Deoxy-3'-azidothymidine

L32 ANSWER 72 OF 72 FEDRIP COPYRIGHT 2002 NTIS
ACCESSION NUMBER: 2002:46310 FEDRIP
NUMBER OF REPORT: VA 129270
NUMBER OF CONTRACT: 0005, 584
RESEARCH TITLE: **Gallium** Therapy for Mycobacterial Infections
STAFF: Principal Investigator: Schlesinger, Larry S., M.D.
PERFORMING ORGN: Department of Veterans Affairs, Medical Center, Iowa City, IA
SUPPORTING ORGN: Supported By: Department of Veterans Affairs, Research and Development (15), 810 Vermont Ave. N.W., Washington, D.C., 20420, United States of America
PROJECT START DATE: Sep 2, 1999
FILE SEGMENT: Department of Veterans Affairs
SUMMARY: TUBERCULOSIS; RADIOTHERAPY; MYCOBACTERIUM INFECTIONS OBJECTIVE: We propose the following two specific aims: 1) examine mec hanism(s) whereby Ga is acquired and exhibits its microbicidal effects of M. tuberculosis (M.tb) and M. avium/intracellular complex (MAC), and 2) determine the mechanism(s) whereby Ga trafficks from the extracellular environment to the mycobacterial phagosome in macrophages and its effect on mycobacterial viability in t his location. RESEARCH PLAN: **Gallium** (Ga), a group IIIA transition metal, particula rly in the form of Ga nitrate [Ga(N03)3], has been used clinically to localize neoplasms and inflammatory sites due to its concentration in tumor cells and macrophages and also to treat malignant neoplasms and associated hypercalcemia. The effects of Ga relate to its ability to substitute for Fe in many biornolecular processes, thereby disrupting them. Ga targets **ribonucleotide reductase** (RR) in eukaryotic cells, a critical enzyme in DNA replication. Bacteria also contain RR. Ga, like Fe, enters macrophages via both transferrin-dependent and transferrinindependent mechanisms. Thus, we hypothesize that Ga compounds may represent a new class of agents for treating mycobacterial infections through disruption of bacterial Fe-dependent metabolic pathways. Our goal is to characterize completely the mechanism of action of Ga against pathogenic mycobacterial with the eventual goal to determine the feasibility of the use of Ga compounds as therapeutic agents for this important group of pathogens. METHODOLOGY: Our methods include cell

culture, radiolabeled Ga bindin g studies and assays of enzyme activity. FINDKINGS: Our studies indicate that Ga inhibits the growth of M.tb i ncluding an

MDR

strain, and MAC extracellularly and within human macrophages. Ga treatment is cidal against M.tb growing in macrophages. The Gamediated growth inhibition is additive with other anti mycobacterial drugs. The effect of Ga is reversed with excess Fe and Ga interrupts the ability of intracellular M.tb to acquire exogenous Fe. Finally, our studies indicate that Ga reduces the enzymatic activity of purified recombinant RR from M.tb. Our methods include cell culture, radiolabeled Ga binding

studies

and assays of enzyme activity. Recent studies show that Ga is effective against a range of iron and has activity in a guinea pig mode l of tuberculosis. CLINICAL RELEVANCE: Diseases due to M.tb and MAC cause significant wo rldwide morbidity and mortality especially in AIDS patients. MAC are uniformly multidrug-resistant (MDR) and MDR strains of M.tb

are

becoming more prevalent. Treatment requires multiple antibiotics with significant toxicity administered over months to years. Thus, there is the need to evaluate novel, effective therapeutic agents with

the

promise of reducing the duration of therapy. M.tb

and

MAC are representative of a group of intracellular pathogens that enter and multiply within mononuclear phagocytes. Iron (Fe) availability is critical for mycobacterial growth, making disruption of this aspect of mycobacterial metabolism an attractive target for antimicrobial therapy.

SUBJECT INDEX TERM: TUBERCULOSIS; RADIOTHERAPY; MYCOBACTERIUM INFECTIONS

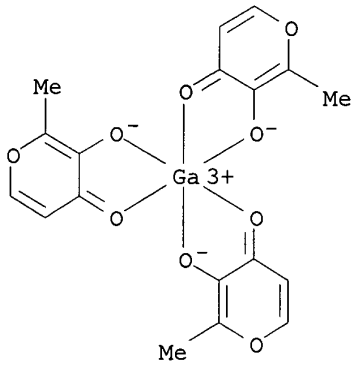
=>

L28 ANSWER 1 OF 65 DRUGNL COPYRIGHT 2002 IMSWORLD

ACCESSION NUMBER: 2001:1271 DRUGNL
TITLE: **gallium** maltolate Titan phase change II, USA (cancer)
SOURCE: R&D Focus Drug News (9 Apr 2001).
WORD COUNT: 99

L28 ANSWER 2 OF 65 DRUGUPDATES COPYRIGHT 2002 IMSWORLD

ACCESSION NUMBER: 2000:750 DRUGUPDATES
SOURCE: R&D Focus, (9 Apr 2001)
GENERIC NAME: **gallium maltolate**
CHEMICAL NAME: **(OC-6-21)-tris[3-(hydroxy-kappaO)-2-methyl-4H-pyran-4-onato-kappaO4]gallium**
CAS REGISTRY NO.: **108560-70-9**
STRUCTURE:



CLASSIFICATION: L1X Other Cytostatics; **J5C9 Other HIV Antivirals**
HIGHEST DEV. PHASE: Phase II (40)

COMPANY INFORMATION:

Type	Company	Nationality
Originator	Titan	United States
Assignee	GeoMed	

L28 ANSWER 3 OF 65 PHAR COPYRIGHT 2002 PJB
AN 26705 PHAR
DN 031094
CN **gallium** maltolate
CN 4H-Pyran-4-one, 3-hydroxy-2-methyl-, **gallium** complex
STA Active

CO

Type	Company Name (Country)	Development Status
Originator	Titan Pharmaceuticals (United States)	Phase II Clinical Trial

SO Pharmaprojects. PJB Publications Ltd., Richmond, Surrey, UK

TX **Gallium** maltolate is an orally-active **ribonucleotide reductase** inhibitor, under development by Titan Pharmaceuticals for the treatment of cancer (Press release, Titan, 2 Apr 2001; Company Web Page, Titan, 25 Jan 2002).

Marketing
It was acquired by Titan when Titan acquired GeoMed (Press release, Titan, 20 Jul 2000).

Clinical

Phase IIIt is in a multicentre Phase II clinical trial in 104 patients with refractory multiple myeloma, metastatic prostate cancer, metastatic bladder cancer and refractory lymphoma. It will be administered at 1 of 3 dose levels in 28-day cycles to determine safety and tumour response (Press release, Titan, 2 Apr 2001; Direct communication, Titan, 30 Mar 2002). Phase I/II trials for treating **HIV** infection were planned for the 1st qtr of 2002 (not started as of Jun 2002) (Company Web Page, Titan, 25 Jan 2002; Direct communication, Titan, 18 Jun 2002).

Phase IIn Phase I trials, po administration produced potentially therapeutic serum concentrations, with pharmacokinetics that indicated twice- or once-daily dosing. It was safe for up to 28 days (Press release, Titan, 20 Jul 2000; Direct communication, Titan, 30 Mar 2002).

Preclinical
Preclinical evaluation for use in treating **HIV** infection is underway (Direct communication, Titan, 18 Jun 2002). In vitro, **gallium** maltolate inhibited **ribonucleotide reductase** and enhanced the effects of nucleoside inhibitors such as didanosine and stavudine (both qv) (Company Web Page, Titan, 25 Jan 2002). Updated by SB on 24/6/2002.

DSTA World: Phase II Clinical Trial
Canada: Phase II Clinical Trial
United States: Phase II Clinical Trial

CC K6Z Anticancer, other
J5A **Antiviral, anti-HIV**

CT Indication: Cancer, myeloma; Cancer, prostate; Cancer, bladder; Cancer, lymphoma, general; Infection, **HIV**/AIDS

ORGM CH-SY (Chemical synthesis, synthetic)

RTE A-PO (Alimentary, po)

RDAT 20000726 RNTE ##Act##New Product
20000726 ##Act##New Chemical Structure New
20001121 ##Act##New Indication Cancer, lymphoma and myeloma and **HIV**/AIDS

[redacted]

20010402 ##Act##Status changed Phase II Clinical Trial
20020125 ##Est##New Indication Cancer, bladder and Cancer, lymphoma,
general
PHCD RIB-TP-AN; Enzyme, Oxidoreductase, Ribonucleoside triphosphate reductase inhibitor; Antineoplastic e.g. hydroxyurea; **Ribonucleotide reductase** inhibitor; E-OR-RIB-TP-AN; 1.17.4.2.
PHCD E; E-AN; E-OR; E-OR-AN; E-OR-RIB; E-OR-RIB-AN; E-OR-RIB-TP; E-OR-RIB-TP-AN; OR; OR-AN; OR-RIB; OR-RIB-AN; OR-RIB-TP; OR-RIB-TP-AN; RIB; RIB-AN; RIB-TP; RIB-TP-AN; TP; TP-AN.

LN

Therapy (CC)	Pharmacology (PHCD)	Status (DSTC)
K6Z	RIB-TP-AN	C2
J5A	RIB-TP-AN	P

NRAT 6:Novelty Rating - Leading Compound
MRAT 3:Market Rating - US$ 2001-5000 million
SRAT 4:Speed Rating - Faster than Average
TRAT 13:Total Rating - Total Rating
LCDAT 20020624: SB : Clinical information updated

STRUCTURE DIAGRAM IS NOT AVAILABLE

L31 ANSWER 188 OF 513 PROMT COPYRIGHT 2002 Gale Group

ACCESSION NUMBER: 2000:616469 PROMT
TITLE: Titan Pharmaceuticals Acquires Novel Agent for the Treatment of Cancer and Viral Disease.
SOURCE: Business Wire, (20 Jul 2000) pp. 245.
PUBLISHER: Business Wire
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 576
TEXT:

Business Editors

SOUTH SAN FRANCISCO, Calif.--(BUSINESS WIRE)--July 20, 2000

Titan Pharmaceuticals Inc. (AMEX: TTP) announced today that it has acquired worldwide rights to a novel, proprietary, experimental agent for the potential treatment of cancer and other conditions, including **HIV** infection. The product is an orally active agent that has completed initial Phase I clinical testing. Titan plans to begin Phase II clinical development in the treatment of certain cancers, and also evaluate its potential utility in other indications, including **HIV** infection.

The agent, **gallium** maltolate, contains an oral form of ***gallium*** , a semi-metallic element that is known to concentrate in malignant tumors and sites of infection. In previous pilot clinical studies, intravenously administered **gallium** has demonstrated preliminary evidence of anti-tumor activity in several cancer indications, including multiple myeloma, lymphoma and bladder cancer. Recent in vitro data indicate that **gallium** may also have potential for the treatment of **HIV** infection.

Titan believes **gallium** maltolate may unlock the therapeutic potential of **gallium**, by providing a unique orally active formulation for treatment of cancer and other diseases. Recent Phase I studies of ***gallium*** maltolate have demonstrated a good safety profile, with attainment of potentially therapeutic serum drug levels, and pharmacokinetics that support twice a day or once a day dosing.

Dr. Christopher Chitambar, Professor of Medicine at the Medical College of Wisconsin stated, "Previous clinical studies of intravenous **gallium** have shown promise in the treatment of a number of cancers and cancer-related conditions. An orally bioavailable agent such as **gallium** maltolate offers numerous potential advantages, and could provide an important new component to the therapy of several types of cancer." Dr. Chitambar has extensive research and clinical experience with the therapeutic applications of novel compounds in the treatment of cancer.

"We are very pleased to acquire rights to this unique proprietary therapeutic agent," commented Dr. Louis R. Bucalo, Chairman, CEO and President of Titan. " ***Gallium*** maltolate may provide the best practical means for utilizing the novel anti-cancer activity of **gallium**, and we look forward to

initiating further clinical testing."

With the addition of this new agent, Titan now has nine products in development, with seven in clinical testing. Titan is acquiring the product through the acquisition of GeoMed, Inc. a privately held California company founded for development of the agent. The completion of the acquisition is subject to customary closing conditions.

Titan Pharmaceuticals, Inc. is a biopharmaceutical company developing proprietary therapeutics for the treatment of central nervous system disorders,
cancer and other serious and life-threatening diseases.

The press release may contain "forward-looking statements"within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Such statements include, but are not limited to, any statements relating to the Company's development program and any other statements that are not historical facts. Such statements involve risks and uncertainties, including, but not limited to, those risks and uncertainties relating to difficulties or delays in development, testing, regulatory approval, production and marketing of the Company's drug candidates, unexpected
adverse side effects or inadequate therapeutic efficacy of the Company's drug candidates that could slow or prevent product markets, the uncertainty of patent protection for the Company's intellectual property or trade secrets and the Company's ability to obtain additional financing if necessary. Such statements are based on management's current expectations, but actual results may differ materially due to various factors, including those risks and uncertainties mentioned or referred to in this press release.

PRODUCT CODE:	*PC2831000 Biological Products
CORPORATE NAME:	*Titan Pharmaceuticals Inc. (Ticker Symbol: TNP)
INDUSTRY CLASS:	*BUS Business, General; BUSN Any type of business
N. AM. IND. CLASS:	*325414 Biological Product (except Diagnostic) Manufacturing
GEOGRAPHIC TERM:	*CC1USA United States
FEATURES:	LOB; COMPANY